

REMARKS

Claims 1-11 are pending in the application. Applicants had previously amended the dependency of Claims 3, 4, and 7 on July 20, 2000. Those amendments were erroneously not included in the previous listing of claims on July 7, 2003, but are included in the current listing of claims. Claims 1-11 stand rejected under 35 U.S.C. § 102 (e) as being anticipated by Kojima at al. (US 6,057,893) and as being anticipated by Kato et al. (US 6,535,556). In response, Applicants are amending claims 1 and 9. Reexamination and reconsideration in view of the remarks contained herein are respectfully requested.

Basis for the phrase “including picture rate coding decisions and macroblock rate coding decisions” can be found, for example, on page 2, lines 12 to 17 and on page 3, lines 7 to 12. Basis for the phrase “outputting said representation from the compression coding step ” in Claim 1 and “from the compression pre-processing apparatus” in Claim 9 can be found, for example, on page 3, lines 13 to 16 and on page lines 1 to 4, and is considered clear from the description and drawings taken as a whole.

The disclosure of the Kojima reference will be briefly considered. As stated in the abstract, the Kojima reference describes “a picture encoding method.” In this method, the sequence of intra-frame, forward predictive and bi-directional predictive coding (or GOP structure) is varied according to detected scene changes. The encoder of the Kojima reference, therefore, provides at its output an encoded video signal having improved quality without having a significantly increased bitrate.

The present invention, in contrast, is not an encoder. The method and apparatus of the present invention receives an uncoded signal and outputs the same (albeit possibly delayed) uncoded signal, together with an information bus. Claims 1 and 9 have been amended in an attempt to further emphasize this fundamental distinction over the cited art.

The Examiner’s reasoning in paragraph 4 will now be considered in greater detail. The Examiner considers that the step of processing coding decisions is illustrated at blocks 45, 46, and 47 of Figure 6B. It is respectfully submitted that these stages do not in fact process coding decisions, but process the image signal itself. In this circuit, the image signal, represented as the

difference between input image data and prediction image data, is output from prediction encoding circuit 44. The image signal is then subject to discrete cosine transformation (45), quantization (46), and variable length coding (47).

The Examiner further considers that the step of outputting the processed coding decisions along with the input video signal is demonstrated at blocks 45 and 46 of Figure 6B. As stated above, these processing stages act on the image signal and cannot be considered to represent the passing or processing of coding decisions. Neither, it is submitted, do these stages represent passage of the input video signal. The image signal passing through these stages has already been prediction coded by prediction encoding circuit 44, and cannot be considered to be the input video signal.

In addition, and as mentioned above, the output of the encoder of Figure 6B is encoded data, which can be recorded on a recording medium (120) or transmitted via a transmission channel (110). The encoder of Figure 6B does not output either the (uncoded) input signal or a representation of coding decisions.

It is therefore considered that the present invention is patentably distinct from the Kojima reference.

However, in order to clarify these distinctions still further, the claims have been amended to specify that the output processed coding decisions include picture rate coding decisions and macroblock rate coding decisions. No mention is made in the Kojima reference of outputting macroblock based coding decisions, for example motion vectors or macroblock prediction modes.

The disclosure of the Kato reference will now be considered. The Kato reference discloses an encoder for coding image information. Referring to Figure 3, and columns 3-11 cited by the Examiner, there is disclosed an encoder which uses intra-, forwards, and backwards coding to encode input image data, in which encoding is controlled taking into account the buffer occupancy of a downstream decoder. Referring to Figure 3 of the Kato reference, the encoding apparatus 1 receives an image input signal S1. Under the control of a coding control circuit the

image input signal is coded by DCT decomposition 9, quantization 10, and variable length coding 11. The coded output of variable length coding circuit 11 is output from the encoder 1.

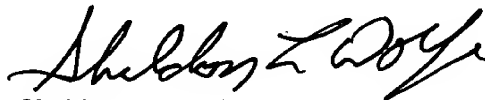
The encoder of the Kato reference receives a single uncoded image input and outputs a single coded output. The output is passed to a decoder to form an encoder-decoder cascaded pair arrangement.

The Kato reference, therefore, does not disclose outputting a representation of coding decisions, nor does it disclose outputting the (uncoded) video signal for passage along a video pathway, as required by the present invention.

CONCLUSION

Entry of the Amendment and allowance of claims 1-11 are respectfully requested. The undersigned is available for telephone consultation at any time during normal business hours.

Respectfully submitted,



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